

PHASE I BOOK EXPLOITATION

SOV/5411

Konferentsiya po fiziko-khimicheskim osnovam proizvodstva stali. 5th,
Moscow, 1959.

Fiziko-khimicheskiye osnovy proizvodstva stali; trudy konferentsii
(Physicochemical Bases of Steel Making; Transactions of the
Fifth Conference on the Physicochemical Bases of Steelmaking)
Moscow, Metallurgizdat, 1961. 512 p. Errata slip inserted.
3,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni
A. A. Baykova.

Responsible Ed.: A. M. Samarin, Corresponding Member, Academy
of Sciences USSR; Ed. of Publishing House: Ya. D. Rozentsveyg.
Tech. Ed.: V. V. Mikhaylova.

Card 1/16

Physicochemical Bases of (Cont.)

115
SOV/5411

PURPOSE: This collection of articles is intended for engineers and technicians of metallurgical and machine-building plants, senior students of schools of higher education, staff members of design bureaus and planning institutes, and scientific research workers.

COVERAGE: The collection contains reports presented at the fifth annual convention devoted to the review of the physicochemical bases of the steelmaking process. These reports deal with problems of the mechanism and kinetics of reactions taking place in the molten metal in steelmaking furnaces. The following are also discussed: problems involved in the production of alloyed steel, the structure of the ingot, the mechanism of solidification, and the converter steelmaking process. The articles contain conclusions drawn from the results of experimental studies, and are accompanied by references of which most are Soviet.

Card 2/16

Physicochemical Bases of (Cont.)

SOV/5411

Shumov, M. M. Producing Steel and Semifinished Products in a Converter by Using Naturally Alloyed Chromium Pig Iron 268

Gurevich, B. Ye., V. D. Epshteyn, and T. V. Andreyev. Determining the Optimum Conditions of Slag Formation, Dephosphorization, and Decarburization of High-Phosphorus Pig Iron in a Semicommercial Converter With Oxygen Top Blowing 281

Baptizmanskiy, B. I., and Yu. A. Dubrovskiy. Investigating the Converter-Steel Contamination in Oxygen Top Blowing 292

Mazun, A. I., and A. S. Ovchinnikov. Gas Content in Steel Made in a Converter With Various Types of Blasts and Blowing 299

Afanas'yev, S. G., M. M. Shumov, and M. P. Kvitko. Some Kinetic and Process Regularities in the Oxygen Top Blowing of Pig Iron 308

Card 11/16

S/137/61/000/012/010/149
A006/A101

AUTHOR: Shumov, M.M.

TITLE: Melting of steel and semiproducts from crude-alloy chrome-nickel cast iron in a converter

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 47-48, abstract 12V284 (V sb. "Fiz.-khim. osnovy proiz-va stali", Moscow, Metallurgizdat, 1961, 268 - 280)

TEXT: TsNIIChM and the Novo-Tul'skiy Metallurgical Plant developed converter refinement of Kalilovo cast iron with top supply of technically pure O_2 . The work was performed in two directions: 1) refinement of cast iron with 2.5-3.0% Cr into low-alloy steel and carbon low-phosphorous semiproduct with about 0.8% Cr; 2) refinement of cast iron with 1.5% Cr melted from a mixture of crude-alloy and conventional open-hearth ores into low-alloy steel. On the whole 500 heats were produced, 47 of which with cast iron containing 1.4 - 1.6% Cr and 1.0-1.2% Ni. The heats were melted in a 7 - 9-ton converter, lined with magnesite, periclase-spindellide and chrome-magnesite bricks. It was established that when refining cast iron with 1.5% Cr, the process may be interrupted in the case of

Card 1/2

Melting of steel ...

S/137/61/000/012/010/149
A006/A101

a high C content. A technology was developed for melting high-grade steel from cast iron with 3% Cr; in order to determine technical and economical indices this method should however be tested under industrial conditions. The technology of obtaining a semiproduct in the converter proved to be very complicated; the yield of liquid steel was low and the stability of lining was poor. The technology of melting low-alloy CXJL-1 (SKhL-1), CXJL-4 (SKhL-4) and other steel grades from cast iron with 1.5% Cr does not present any difficulties in production: steel output attains 87 - 89%; S and P content in the metal are $< 0.040\%$. To obtain steel with $< 0.040\%$ S at 0.5 - 0.6% Mn, the S content in the cast iron should be $< 0.045\%$. Refinement in a basic converter of cast-iron with 1.1-1.2 Si is not expedient due to the reduced output of liquid steel, complicated technological process and reduced stability of the lining. The Si content should be $< 0.8\%$. The N content in the steel when refining Khalilovo cast iron is about 0.007%. To obtain steel with a lower N content O_2 should be of 99.5% purity.

P. Arsent'yev

[Abstracter's note: Complete translation]

Card 2/2

S/123/62/000/003/001/006
A054/A127

AUTHORS: Voinev, S. G., Kosoy, L. F., Shumov, M. M., Shalimov, A. G.,
Chekhomov, O. M., Andreyev, T. B., Afanas'yev, S. G., Kalinnikov,
Ye. S.

TITLE: Refining converter steel with liquid synthetic slag in the ladle

PERIODICAL: Stal', no. 3, 1962, 226 - 232

TEXT: The good results obtained in refining electric steels with liquid
lime-aluminous slag led to pilot-plant tests with converter steels, using the
same method. 111 heats were smelted in a basic 8-ton converter; 46 of them were
refined in the ladle with liquid synthetic slags of the following composition
(in %):

Card 1/5

Refining converter steel with...

S/133/62/000/003/001/008
A054/A127

Steel grade	Number of heats	CaO	Al ₂ O ₃	SiO ₂	MgO	FeO	Cr ₂ O ₃
UX15 (ShKh15)	6	<u>55.26</u> 53.04	<u>42.73</u> 41.47	<u>1.90</u> 3.85	<u>0.79</u> 0.80	<u>0.82</u> 0.90	<u>0.30</u> 0.17
12XH3A, 06H3 (12KhN3A), (06N3)	5	<u>52.49</u> 49.82	<u>42.46</u> 35.94	<u>2.02</u> 5.06	<u>0.78</u> 0.82	<u>0.90</u> 7.69	<u>0.94</u> 0.92
CT5 (SGV) (deep drawing steel)	7	<u>53.10</u> 51.37	<u>44.22</u> 38.34	<u>2.19</u> 4.52	<u>0.75</u> 0.93	<u>0.65</u> 4.05	<u>0.23</u> 0.23
M (I) (tool, carbon, cable, rail, axle steel)	14	<u>53.58</u> 52.51	<u>44.08</u> 40.92	<u>2.06</u> 3.61	<u>0.69</u> 0.72	<u>0.70</u> 1.75	<u>0.15</u> 0.13

(numerator: composition prior to metal treatment; denominator: composition after the treatment). The slag was melted in a 3-ton arc furnace, with hearth and banks of carbon blocks and carbon packing. The slags differed from those used for electric steels in that they contained more silica, ferrous oxides and

Card 2/5

Refining converter steel with...

S/133/62/000/003/001/002
A054/A127

chrome oxides. To maintain the fluidity and reactivity of the slag under the test conditions, its quantity was increased to 6.5% of the metal weight, the temperature of the liquid slag in the furnace was raised to 1,750 - 1,850°C and the interval between pouring the slag and tapping the metal was reduced (to 2 min. 5 sec. on the average). The ladle was preheated to 600 - 800°C prior to slag tapping. The basic slag forming additives were common open-hearth lime (with up to 0.2% S), bauxite and in some cases (for medium-carbon and high-carbon steel grades) fluorite. Lime was added in two batches: prior to pouring the cast iron and 4 - 5 minutes after blowing started; the other two components were added together with lime. The quantity of the latter used for alloy and high-grade steels was 8 - 9%, for rail and axle steel 6 - 7% of the charge weight. ShKh15, 12KhN3A, 05N3 grades, deep-drawing steel and carbon (tool) steels were cast with fluorite (0.3 - 0.8% of the charge weight; the slag was tapped twice.) To determine the optimum cast iron composition, cast irons with components varying greatly in amount were used (0.28 - 0.78% Si, 0.50 - 1.80% Mn, 0.025 - 0.095% S, 0.085 - 0.220P). The slags were very active already at the beginning of blowing. The basicity of slags ($\text{CaO}:(\text{SiO}_2 + \text{P}_2\text{O}_5)$) increased progressively (5 - 5 1/2 minutes after blowing started it was 2.0, at the end of blowing: 3.0 - 4.0). The synthetic slag refining method in converters with oxygen top blast results in a

Card 3/5

3/133/52/000/003/001/008
A054/A127

Refining converter steel with...

high degree of desulfuration. When cast irons are processed with a high (0.085 - 0.095%) sulfur content, this could be reduced to 0.030 - 0.042% during blowing and to 0.009 - 0.013% after slag treatment. Desulfuration is most effective in the У10-У13А (U10-U13A) grades (up to 72.8%), in axle steel (71.9%) and ShKh15 steel grade (67.8%). The final phosphorus content of steel can also be reduced to 0.020 - 0.030% by slag treatment, even if made of cast iron containing 0.22% phosphorus. The synthetic slag method reduces the content of oxygen and non-metallic inclusions (sulfides, oxides) of the steel. Converter structural steel grades, refined by synthetic slag, have a greater ductility and notch toughness (mainly across the fibre), than conventional converter, open-hearth and electric steels. Most probably, the ductility is improved by the effect of the synthetic slag emulsion on the metal which reduces the sulfur content and non-metallic inclusions; a sub-microscopic silicium-oxygen phase may also have some effect. Slag-refined converter axle steels displayed a high ductility at -20°, -40° and -60°C, the new refining method imparts the 06N3 cold-resistant converter steel at 150 - 183°C the same degree of frost-resistance as found in electric steels. The tests were carried out with A. N. Korneyenkov, G. V. Gurskiy, Ya. M. Bokshitskiy, A. K. Petrov, Ye. D. Mokhir, R. I. Kolyasnikova, G. A. Khasin, V. P. Danilin.

Card 4/5

Card 5/5

KVITKO, M.P.; SHUMOV, M.M.; AFANAS'YEV, S.G.

Investigating the oxygen-converter process for the converting of
low-manganese pig iron. Stal' 23 no.6:501-508 Je '63.
(MIRA 16:10)

AFANAS'YEV, S.G.; DUKHANIN, A.S.; KVITKO, M.P.; SHUMOV, M.M.;
DARUSHIN, R.I.; KOSHKIN, V.A.; ZAKHARENKO, N.I.;
KRITININ, I.A.

Railroad rails made of oxygen-blown converter steel. Stal' 24
no.1:72-73 Ja '64. (MIRA 17:2)

KAZANSKIY, V.V. (Moskva); LEVENETS, N.P. (Moskva); AFANAS'YEV, S.G.
(Moskva); SHUMOV, M.M. (Moskva)

Viscosity of phosphate slags in the oxygen-blown converter
process. Izv. AN SSSR. Met. i gor. delo no.6:64-69 N-D '64.
(MIRA 18:3)

SHUMOV, N.D.

Cable guide rollers for the grabs of coal loaders. Koks i Khim. no.
10:57 '62. (MIRA 16:9)

1. Cherepovetskiy metallurgicheskiy zavod.
(Loading and unloading--Equipment and supplies)

SHUMOV, N.D.

Cracks in the runway girders of coal reloading machines. Koks
i khim. no.9:56-59 '63. (MIRA 16:9)

1. Cherepovetskiy metallurgicheskiy zavod.
(Cranes, derricks, etc.--Maintenance and repair)
(Beams and girders--Welding)

SHUMSKAYA, N.I.

Labor safety in using epoxy resins. Mashinostroitel'
no.12:33-34 D '64.

(MIRA 18.2)

SHUMOV, N.

Credit for operating capital for enterprises of the heavy industry.
(In: Moscow. Nauchno-issledovatel'skii finansovyi institut. Nauch-
nye zapiski. Moskva, 1953, p.169-204.) (MLRA 7:2)

1. Moscow. Nauchno-issledovatel'skiy finansovyy institut.
(Credit)

SHUMOV, N; BARKOVSKIY, N., redaktor; SUBBOTINA, K., redaktor; LEBEDEV, A.,
~~tekhnicheskii~~ tekhnicheskii redaktor.

[Short-term credit for industrial enterprises] Kratkosrochnoe kreditovanie promyshlennogo predpriiatiia. Moskva, Gosfinizdat, 1954.
126 p. (MIRA 8:4)
(Credit)

SHUMOV, N.
PODSHIVALENKO, P.; SHUMOV, N.

Paying by larger categories in the construction industry. Fin.1
kred. SSSR no.3:35-43 Mr '54. (MLRA 7:4)
(Construction industry--Finance)

SHUMOV, NIKOLAY SERGEYEVICH

N/5
773.1
.55

RASCHETNYYE KREDIT Y GOSBANKA PROMYSHLENNYM PREDPRIYATIYAM (GOSBANK CREDIT
PAYMENTS BY INDUSTRIAL ENTERPRISES) MOSKVA, GOSFINIZDAT, 1956.

79 P.

SHUMOV, N.

The utilization of profits of industrial enterprises. Fin.SSSR 17 no.3:
39-44 Mr '56. (MIRA 9:7)
(Industrial management) (Profit)

SHUMOV, N.

Control work of financial organs. Fin. SSSR 17 no.12:8-16
D '56.

(MLRA 10:1)

(Finance)

N/5
740.09
.55

SHUMOV, NIKOLAY SERGEYEVICH

Kontrol' finansovykh organov za finansovo-khozyaystvennoy deyatel'nost'-
yu promyshlennykh predpriyatiy (Check of financial devices for the finance
and economy of industrial enterprises) Moskva, Gosfinizdat, 1957.

81 p. tables.

At head of title: Moscow. Nauchno--Issledovatel'skiy Finansovyy Institut.

SHUMOV, N. S

25(3)

PHASE I BOOK EXPLOITATION

SOV/1660

Meyerovich, Grigoriy Mikhaylovich, and Nikolay Sergeyevich Shumov

Finansirovaniye i kreditovaniye predpriyatiy legkoy promyshlennosti
(Financing and Crediting Light Industry Establishments) Moscow,
Gizlegprom, 1958. 241 p. 5,500 copies printed.

Reviewer: M. I. Pevzner; Ed. (Title page): N. T. Nikitin; Ed. (Inside
book): N. M. Segal'; Tech. Ed.: L. Ya. Medvedev.

PURPOSE: The manual is intended for students in tekhnikums of the
textile industry and other branches of light industry. It may
also be useful to factory workers and serve also as a textbook
for courses and seminars.

COVERAGE: This manual discusses: 1) principles of financial
organization in industrial establishments; 2) methods of planning
and using capital accumulations and current assets; 3) the
sequence followed in financing capital construction and
general overhaul; 4) problems encountered in setting up financial

Card 1/6

Financing and Crediting (Cont.)

SOV/1660

plans; and 5) short-term crediting of establishments and making payments. Data on production costs, income turnover, taxes etc. quoted in this textbook in tables and calculations, are used for illustrative purposes only. Chapters I, V, and VI were written by N.S. Shumov, and Chapters II, III, IV, and VII by G.M. Meyerovich. There are no references or personalities mentioned.

TABLE OF CONTENTS:

Foreword	3
Ch. I. Principles of Financial Organization for Industrial Establishments	5
Ch. II. Capital Accumulation of Industry (Monetary)	18
1. Expenditures of an industrial establishment on production and product realization	18
2. Proceeds from product realization	26
3. System and structure of prices	30
4. Two forms of capital accumulation	35
1. Turnover tax	36
2. Income of establishments; industrial branches	41

Card 2/6

SHUMOV, N.S., kand.ekonom.nauk; LAPTEV, Ye.N.; KAZANTSEV, A.I., kand. ekonom.nauk; ZUYEVA, Z.I.; KOCHEGAROVA, A.I.; SHRAYBER, I.I., kand.ekonom.nauk; TSAPIN, I.T.; KITAYGORODSKIY, I.P.; ZAVER-NYAYEVA, L., red.; TELEGINA, T., tekhn.red.

[Payments in industry] Raschety v promyshlennosti. Moskva, Gosfinizdat, 1959. 125 p. (MIRA 12:11)

1. Moscow. Nauchno-issledovatel'skiy finansovyy institut. 2. Zaveduyushchiy otdeleniyem Nauchno-issledovatel'skogo finansovogo instituta Ministerstva finansov SSSR (for Shumov). 3. Starshiy ekonomist Nauchno-issledovatel'skogo finansovogo instituta Ministerstva finansov SSSR (for Laptev). 4. Nachal'nik upravleniya kreditovaniya promyshlennosti sovmarkhozov Pravleniya Gosbanka SSSR (for Kazantsev). 5. Nachal'nik planovo-ekonomicheskogo otdela Moskovskoy gorodskoy kontory Gosbanka (for Zuyev). 6. Ekonomist Moskovskoy gorodskoy kontory Gosbanka (for Kochegarova). 7. Zamestitel' nachal'nika planovo-ekonomicheskogo upravleniya Rossiyskoy respublikanskoy kontory Gosbanka (for Shrayber). 8. Glavnyy bukhgalter moskovskogo khlebozavoda No.4 (for TSapin). 9. Ekspert otdela kredita i denezhnogo obrashcheniya Ministerstva finansov SSSR (for Kitaygorodskiy).
(Payment)

MEYEROVICH, Grigoriy Mikhaylovich; SHUMOV, Nikolay Sargeyevich, kand.
ekon.nauk; MITEL'MAN, Ye., otv.red.; FILIPPOVA, E., red.
izd-va; LEBEDEV, A., tekhn.red.

[Financial organization in an industrial enterprise; based on
materials of textile industry enterprises] Organizatsiia
finansov na promyshlennom predpriatii; po materialam pred-
priatii tekstil'noi promyshlennosti. Moskva, Gosfinizdat,
1960. 109 p. (MIRA 13:4)
(Textile industry--Finance)

BIRMAN, A.M., doktor ekonom.nauk; BRAZOVSKAYA, T.I.; BELOUSOVICH, S.N.;
VESELKOV, F.S.; KATSENELEBAUM, Z.S.; IVLIYEV, I.V.; SEMENOV, I.Ya.;
YAKOVLEV, M.S.; LAYKHTMAN, R.I.; GOFMAN, G.A.; SHUMOV, H.S.;
VINOKUR, R.D., dotsent; TATSIY, G.M., red.; KONDRAT'YEVA, A., red.;
TELEGINA, T., tekhn.red.

[Finances of enterprises and branches of the national economy]
Finansy predpriatii i otraslei narodnogo khoziaistva. Avtorskii
kollektiv pod rukovodstvom A.M.Birmana. Moskva, Gosfinizdat, 1960.
576 p. (MIRA 14:3)

1. Moskovskiy finansovyy institut (for Vinokur).
(Finance)

SHUMOV, N.

Payment on acceptances and letters of credit. Den. 1 kred. 18 no.9:
18-24 S '60. (MIRA 13:8)
(Acceptances) (Letters of credit)

SHUMOV, P.S.

Construction of cultural and communal institutions and organization of public services in Belgorod Province villages. Zdrav. Ros. Feder.
1 no.5:13-17 My '57. (MIRA 10:11)

1. Zaveduyushchiy Belgorodskim oblastnym otделom zdravookhraneniya.
(BELGOROD PROVINCE--HOSPITALS, RURAL)

ACCESSION NR: AP4043392

S/0181/64/006/008/2539/2541

AUTHORS: Sobolev, V. V.; Andriyesh, A. M.; Sy*rbu, N. N.; Shumov, S. D.

TITLE: Reflection spectra of crystals of groups II-IV and III-VI

SOURCE: Fizika tverdogo tela, v. 6, no. 8, 1964, 2539-2541

TOPIC TAGS: indium antimonide, cadmium alloy, group II element, group III element, group IV element, group VI element, reflected radiation spectrum, band spectrum

ABSTRACT: This investigation was undertaken in connection with the great interest which is attached to compounds of the CdSb and In_2Te_3 type. The energy structure of crystals of groups II--V and III--VI was investigated at 290K in the region 1--6 eV. The reflection spectra of polished and etched crystals CdSb, ZnSb, 56% ZnSb-44% CdSb, Cd_4Sb_3 , Zn_3Sb_2 , Zn_4Sb_3 , In_2Se_3 , In_2Te_3 , CdIn_2Se_4 , Ga_2Se_3 , Ga_2Te_3 ,

Card 1/3

ACCESSION NR: AP4043392

GaSe, and GaTe were investigated. The similarities and differences between the various spectra are briefly discussed. It is concluded that in view of the similarity of their reflection spectra, the crystals CdSb, ZnSb, and Zn_3Sb_2 , Zn_4Sb_3 , and Cd_4Sb_3 have similar energy-band structures and nearly equal transition energies. The general conclusion is that the compounds of groups II--V and III--VI are close to compounds of groups III--V and II--VI not only in lattice structure but also in the type of bond and energy-band structure. Orig. art. has: 1 figure.

ASSOCIATION: Institut fiziki i matematiki AN MoldSSR, Kishinev
(Institute of Physics and Mathematics, AN MoldSSR)

SUBMITTED: 23Jan64

ENCL: 01

SUB CODE: SS

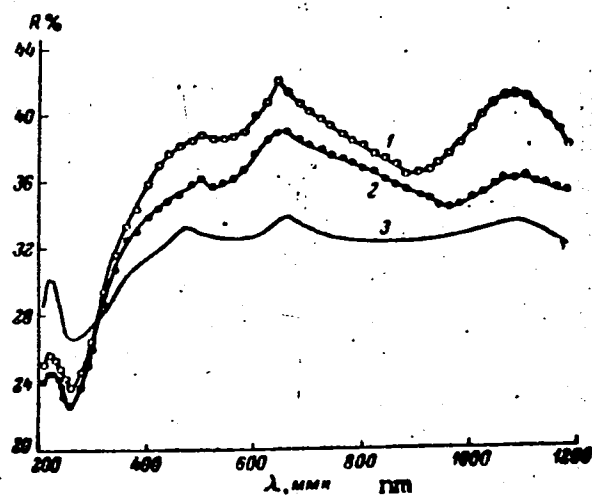
NR REF SOV: 003

OTHER: 001

Card 2/3

ACCESSION NR: AP4043392

ENCLOSURE: 01



Reflection spectra at $T = 290^\circ\text{K}$ in the range of 1-6 eV; 1 - ZnSb, 2 - CdSb, 3 - In₂Te₃

Card 3/3

BRONNIKOV, K.Ye., podpolkovnik med.sluzhby, kand.med.nauk; SHUMOVA, S.V.,
podpolkovnik med.sluzhby

Late results of surgery for injured menisci of the knee joint.
Voen.-med.zhur. no.10:87 0 '61. (MIRA 15:5)
(KNEE--SURGERY)

SHUMOV, V., ZEN'KOVICH, Z., IVANOV, A.,

"The Rhythmic Production of Diesel-Electric Locomotives Necessitates
Strict Cooperation," Gudok, 37, No. 45, p. 3, 22 Feb 1957, Moscow

Translation U-3,053,838

YERSHOV, Ye.M.; SUCHKOV, V.I.; SHUMOV, V.P.; FEDOROV, S.F.

Apparatus for amplitude and phase measurements in the inductive method.
Geofiz.razved. no.4:48-64 '61. (MIRA 14:7)
(Electromagnetic prospecting)

YERSHOV, Ye.M.; SUCHKOV, V.I.; SHUMOV, V.P.

Experimental studies of the electromagnetic fields of magnetic
dipoles over mediums with horizontal and vertical interfaces.

Geofiz.razv. no.13:102-122 '63.

(MIRA 17:4)

L 17160-65 EWT(1) ASD(a)-5/SSD/AFWL/AFETR/ESD(c)/ESD(gs)/ESD(t) GW/
MLK

ACCESSION NR: AT4047269

S/0000/64/000/000/0175/0182

AUTHOR: Yershov, Ye. M.; Shumov, V.P.; Suchkov, V.I. S/I

TITLE: Application of the induction method for solution of problems in geological mapping

SOURCE: Mezhvuzovskaya nauchnaya konferentsiya po induktivny* metodam rudnoy geofiziki. Moscow, 1961. Trudy*. Moscow, Izd-vo Nedra, 1964, 175-182

TOPIC TAGS: geological mapping, geological prospecting, induced electromagnetic field, terrestrial electromagnetic field, magnetic dipole

ABSTRACT: The possibility of application of the induction method with amplitude-phase measurements for the purposes of geological mapping is based on solution of the problem of the electromagnetic field of the magnetic dipole at the earth - air discontinuity. The magnetic moment of the magnetic dipole is considered to be purely fictitious. The values of the electromagnetic field are computed in relation to the parameter

$$p_1 = |kr| = \frac{2\pi r}{c} \sqrt{2\gamma f},$$

Card 1/3

L 17160-65

ACCESSION NR: AT4047269

$$p_i = 2,81 \sqrt{\frac{I}{\rho}} r_i$$

The electromagnetic field of an inclined magnetic dipole is a linear combination of the fields of the horizontal and vertical dipoles. It therefore is sufficient to solve the problem for each of them separately. Solutions are available for the problems of the fields of horizontal and vertical magnetic dipoles over a horizontally layered structure for a distant zone, i.e. $|kr| \gg 1$, and for the induced zone, i.e. $|kr| < 1$. No solutions have been available for the transitional zone where the parameter ranges from 1 to 9. In geophysical investigations by the induction method in which ultrasonic frequencies are used (120-80 kc/s), it is most common to deal with parameters of 1.5-7. The authors therefore modeled the fields of horizontal and vertical dipoles over a two-layer structure with horizontal discontinuities. The model experiments are described. In field investigations by the induction method the apparatus used makes it possible to measure both the phase and amplitude of the different magnetic field components. The apparatus consists of a generator and a receiving apparatus. The low-frequency generator has a loop antenna at the output. The resistivities of rocks are determined easily from the phase differences of the components of the inclined dipole. The receiver is a superheterodyne receiver with one heterodyne for two channels, both of which are completely identical. There are phase inverters in each channel and

Card 2/3

L 17160-65

ACCESSION NR: AT4047269

installed in the second stage of a band-pass amplifier. The receiver is tuned to three fixed frequencies -- 20, 40 and 80 kc/s. Phase is measured at the intermediate frequency 465 kc/s, which makes it possible to simplify the phase inverter circuit considerably. The sensitivity of the receiver is 10 μ v on the scale of the indicator-type instrument. The antennas were loops at the inputs of both channels. This apparatus was used in developing the method of geological mapping in Karelia and the Transbaykal region (Yershov, Ye. M., Suchkov, V. I., and Shumov, V. P., Geofiz. razvedka, 1961, No. 4). Certain results of field investigations are reported in the paper reviewed. Orig. art. has: 6 formulas and 6 figures.

ASSOCIATION: Kompleksnaya tematicheskaya geofizicheskaya ekspeditsiya tresta Geofiznefteuglerazvedka (Complex Scientific Geophysical Expedition of the Geophysical Trust for Petroleum and Coal Prospecting)

SUBMITTED: 27Feb64

ENCL: 00

SUB CODE: ES, EM

NO REF SOV: 004

OTHER: 000

Card 3/3

SHUMOV, V. V.

"The Comet-Like Object in 1942, "Meteorniy Byull"." Izv. Turkmen FAN, No. 3(1946),
pp. 3-4

LERMONTOVA, Ye.V.; CHERNYSHEVA, N.Ye., redaktor; SHUMOV, V.V., redaktor;
MANINA, M.P., tekhnicheskii redaktor

[Upper Cambrian trilobites and brachiopods near Boshchekul (north-eastern Kazakhstan)] Verkhnekembriiskie trilobity i brakhiopody Boshche-Kulia (Severo-vostochnyi Kazakhstan). Moskva, Gos. izd-vo geologicheskoi lit-ry, 1951. 49 p. (MLRA 8:6)

(Boshchekul--Trilobites, Fossil)

(Boshchekul--Brachiopoda, Fossil)

FOTEYEV, N.K., kand. tekhn. nauk; CHETVERIKOV, S.S., doktor tekhn.
nauk prof., retsenzent; SHUMOV, Ye.G., inzh., retsenzent

[High-strength dies] Vysokostoikie shtampy. Moskva, Ma-
shinostroenie, 1965. 257 p. (MIRA 18:7)

L 39705-65 EPF(n)-2/EPR/EWP(k)/EWT(d)/EWP(h)/EWP(m)/EWP(n)/EWP(b)/EWA(d)/EWP(l)/
EWP(e)/EWP(v)/EWP(t) Pf-l/Ps-l/Pu-l IJP(c) KZ/WH/JD/JG
ACCESSION NR: AP5010397 UR/0121/65/000/004/0025/0026

AUTHOR: Chetverikov, S. S.; Shumov, Ye. G.

TITLE: Electrical-discharge machining of carbide chasers

SOURCE: Stanki i instrument, no. 4, 1965, 25-27

TOPIC TAGS: carbide chaser, threading, threading tool, thread chasing, electrical discharge machining, carbide tool

ABSTRACT: Fabrication of sintered-carbide die-head chasers by electrical-discharge machining (EDM) is discussed. A circular rotating electrode (tool) with a profile and pitch corresponding to that of the thread reproduces its form on a tangential chaser. Using the high-frequency generator GIT-1 developed at TsNIL-ELEKTROM assures high metal-removal rates, a seventh-class of surface finish [0.8—1.6 μ (rms)], and an absence of surface cracks. Kerosene is used as dielectric fluid. The machining conditions were as follows: capacitance, 3300 μ uf for roughing and 1680 μ uf for finishing; pulse duration, 4 μ sec; pulse frequency, 20 kc; idle run

Card 1/2

L 39705-65

ACCESSION NR: AP5010397

voltage, 120 v. As a rule, the entire profile is formed in one cut; only with a considerable length (for a number of blanks) or when high precision is needed is a second finishing cut (depth of cut, 0.2—0.3mm) required. A large batch of experimentally machined chasers from sintered carbides of various types showed good performance characteristics. Orig. art. has: 5 figures. [SS]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: IE

NO. REF SOV: 000

OTHER: 000

ATD PRESS: 3230

Card 2/276

MASLENNIKOV, N.D., kand.tekhn.nauk; MYSHONKOV, N.I., kand.tekhn.nauk;
ALEKSEYEV, B.I., kand.tekhn.nauk; SHUMOV, Ye.N., inzh.;
MASLOV, A.A., inzh.; YANKELEVICH, V.M., inzh.; IZYUMSKIY, F.P.,
inzh.

Investigating gas saturation of cast iron smelted in a cupola
furnace. Mashinostroenie no.6:33-36 N-D '62. (MIRA 16:2)
(Cast iron--Defects)

70-2-5/24

AUTHOR: Venevtsev, Yu.N., Kapyshev, A.G. and Shumov, Yu.V.
 TITLE: An X-ray structural investigation of the system
 $\text{PbTiO}_3 - \text{BaSnO}_3$. (Rentgenograficheskoye issledovaniye systemy
 $\text{PbTiO}_3 - \text{BaSnO}_3$.)
 PERIODICAL: "Kristallografiya" (Crystallography), 1957, Vol.2,
 No.2, pp.233-238 (U.S.S.R.)

ABSTRACT: X-ray powder photographs of the system $\text{PbTiO}_3 - \text{BaSnO}_3$ at various temperatures showed a continuous range of solid solutions. The phase diagram of $(\text{pb}, \text{Ba})(\text{Ti}, \text{Sn})\text{O}_3$ was constructed showing only two phases, one cubic (paraelectric), the other tetragonal (ferro-electric). The diagram agrees with that traced from dielectric measurements by I.E. Myl'nikova. The Curie temperature in this system falls more sharply with increasing Sn concentration than in the $\text{Pb}(\text{Ti}, \text{Sn})\text{O}_3$ system. Both SnTiO_3 and BaSnO_3 have the perovskite structure but the former compound is ferro-electric. Examination of their solid solutions was expected to elucidate some of the factors leading to ferro-electricity in the perovskite structures. Specimens were prepared in the Institute for Silicate Chemistry (IKhS AN SSSR) from BaCO_3 , TiO_2 , SnO_2 and PbO by heating at

Card
1/3

An X-ray structural investigation of the system PbTiO_3 - BaSnO_3 . (Cont.) ^{70-2-5/24}

1 250 C for one hour. X-ray powder photographs were taken with Cu or Cr radiation measuring particularly the high angle lines. The accuracy in the cell sides was about ± 0.003 A.

A change from the tetragonal form (PbTiO_3) to the cubic (BaSnO_3) took place at 43 mol % of the latter with no discontinuity in the cell volume. The ratio c/a does not decrease continuously to 1 but drops sharply from 1.005. High temperature photographs from 30 mol % BaSnO_3 showed a Curie temperature of 190 ± 10 C compared with 490 C for pure PbTiO_3 . Specimens with 43 mol % BaSnO_3 have a Curie temperature about 15 C. A specimen with a Curie temperature of -183 C will have a composition of between 40 and 60% BaSnO_3 . A rhombohedral phase of $\text{Pb}(\text{Ti},\text{Sn})\text{O}_3$ is found. The correctness of the factors proposed earlier by Venevtsev (Dissertation, MIFI, Moscow, 1955, and Izv. Ak. Nauk, Ser Fiz., 21, 2, 1957) as influencing the Curie temperatures of compounds with t less than 1 is confirmed.

Card 2/3 Discussions with Prof. G.S. Zhdanov and the assistance of Dr. G.A. Smolenskiy and Cand. I.E. Myl'nikova are acknowledged. There are 4 figures and 19 references, 9 of which are Slavic.

●An X-ray structural investigation of the system BaSnO_3 . (Cont.) PbTiO_3 ^{70-2-5/24} -

ASSOCIATION: Physico-Chemical Institute im. L.Ya. Karpova. (Fiziko-
Card 3/3 Khimicheskiy Institut i. L.Ta. Karpova)
SUBMITTED: November 16, 1956.
AVAILABLE: Library of Congress

SHUMOV, Yu.V.

Representation of minerals on Russian maps of the 18th century.
Geod. i kart. no.3:57-62 Mr '64. (MIRA 17:9)

SHUMCV, Yu.V.

Discussing the agricultural atlas of the U.S.S.R. Izv. AN SSSR.
Ser. geog. no. 4:160-161 J1-Ag '61. (MIRA 14:7)
(Agriculture--Maps)

BERZINA, L.A.; MAUERMAN, O.Ye.; OKINSHEVICH, Ye.A.; SHUMOVA, B.I.

Influence of various factors on antitoxic immunity to scarlet fever as shown by the Dick test in children. Vop.okh.mat. i det. 4 no.3:36-41 My-Je '59. (MIRA 12:8)

1. Iz infektsionnogo otdela (zav. - prof.M.Ye.Sukhareva) kafedry pediatrii (zav. - deystvitel'nyy chlen AMN SSSR G.N.Speranskiy) Tsentral'nogo instituta usovershenstvovaniya vrachey, epidemiologicheskogo otdela (zav. - prof.Ye.M.Dmitriyeva-Ravikovich) Moskovskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny i sanitarno-epidemiologicheskoy stantsii Kiyevskogo rayona Moskvyy (glavnyy vrach I.F.Krasavin).
(SCARLET FEVER)

SHERMAN, R.Z.; SHEVYAKOVA, O.I.; TATARINOVA, S.D.; SHUMOVA, B.I.;
GOL'TSEKER, A.I.; KOLESNIKOVA, Yu.S.

Bacteriophage and tetracycline in the prevention of dysentery
among contact children. Antibiotiki 10 no. 10:948-952
O '65. (MIRA 18:12)

1. Kafedra mikrobiologii (zav. - deystvitel'nyy chlen AMN SSSR
prof. Z.V. Yermol'yeva) TSentral'nogo instituta usovershenstvo-
vaniya vrachey i Sanitarno-epidemiologicheskoy stantsii (glavnyy
vrach I.F. Krasavin) Kiyevskogo rayona, Moskva. Submitted
Dec. 13, 1963.

SHUMOVA, I.A.

In vivo study of the effect of lead nitrate on the cell.
Trudy ISGMI 45:164-171 '58 (MIRA 11:11)

1. Kafedra obshchey biologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - chlen-korrespondent AMN SSSR, prof. P.V. Makarov).
(LEAD--PHYSIOLOGICAL EFFECT)

SHUMOVA, I.A.

Cytochemistry of cancer cells of the human cervix uteri and breast. TSitologiya 1 no.4:436-442 J1-Ag '59. (MIRA 12:10)

1. Kafedra obshchey biologii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(UTERUS--CANCER) (BREAST--CANCER) (NUCLEIC ACIDS)
(POLYSACCHARIDES)

SHUMOVA, I.A.

Cytochemical studies on nucleic acids, proteins, and polysaccharides
in human cervical and breast tumor cells. Biul.eksp.biol. i med.
48 no.7:68-72 J1 '59. (MIRA 12:10)

1. Iz kafedry obshchey biologii Leningradskogo sanitarno-
gigiyenicheskogo meditsinskogo instituta. Predstavlena
deystvitel'nym chlenom AMN SSSR N.G.Khlopinyam.

(NUCLEIC ACIDS - metab.)

(PROTEINS - metab.)

(POLYSACCHARIDES - metab.)

(BREAST - neoplasms)

SHUMOVA, I. A., Dr.,

"About cytochemical differentiation of cancer cells."

To be submitted for the International Congress of Exfoliative Cytology, Vienna, Austria, 31 Aug-2 Sep 1961.

Institute of Evolutionary Physiology imeni I. N. Sechenov, Leningrad.

ca

100 AND 8TH COLUMNS

PROCESSES AND PROPERTIES INDEX

Solid solutions of beryllium and magnesium in copper. S. A. Pogodin and I. S. Shumova. *Bull. acad. sci. U. R. S. S. Classe sci. chim.* 1940, No. 5, 763-74. Twelve alloys contg. 0.5-2.5% Be and 0.4-0.8% Mg were investigated, and the copper corner of the ternary system Cu-Be-Mg was detd. by means of methods of thermal analysis, microstructure and hardness. Electrolytic Cu and Cu-Be-Mg alloys, contg. 7.0-10.0% Be and 1.1-4.2% Mg, and also a Cu-Mg alloy with 27% Mg were used for making these alloys. The limits of the α -phase, i. e., ternary solid soln. of Be and Mg in Cu at 800°, 650°, 500° and 250°, sepg. the region of α -phase from the adjacent heterophase regions were detd. The mutual decrease of soly. of Be and Mg in solid Cu by each other is shown. The aging of all ternary alloys obtained and the retarding of the aging of alloys contg. 2.0 or 2.5% Be and 0.4-0.8% Mg were studied. Alloys contg. 2.5% Be and 0.4% Mg as well as 1.8% Be and 0.4-0.8% Mg, after hardening at 800° and aging at 350°, have the same hardness as the Mg-free alloys with 2.5% Be, but they have less impact strength than Mg-free bronzes. Aging appeared in alloys contg. 0.5% Be and 0.8-2.8% Mg. 10 references. S. Machelson

13th COLUMN

14th COLUMN

15th COLUMN

16th COLUMN

17th COLUMN

18th COLUMN

19th COLUMN

20th COLUMN

21st COLUMN

22nd COLUMN

23rd COLUMN

24th COLUMN

25th COLUMN

26th COLUMN

27th COLUMN

28th COLUMN

29th COLUMN

30th COLUMN

31st COLUMN

32nd COLUMN

33rd COLUMN

34th COLUMN

35th COLUMN

36th COLUMN

37th COLUMN

38th COLUMN

39th COLUMN

40th COLUMN

41st COLUMN

42nd COLUMN

43rd COLUMN

44th COLUMN

45th COLUMN

46th COLUMN

47th COLUMN

48th COLUMN

49th COLUMN

50th COLUMN

51st COLUMN

52nd COLUMN

53rd COLUMN

54th COLUMN

55th COLUMN

56th COLUMN

57th COLUMN

58th COLUMN

59th COLUMN

60th COLUMN

61st COLUMN

62nd COLUMN

63rd COLUMN

64th COLUMN

65th COLUMN

66th COLUMN

67th COLUMN

68th COLUMN

69th COLUMN

70th COLUMN

71st COLUMN

72nd COLUMN

73rd COLUMN

74th COLUMN

75th COLUMN

76th COLUMN

77th COLUMN

78th COLUMN

79th COLUMN

80th COLUMN

81st COLUMN

82nd COLUMN

83rd COLUMN

84th COLUMN

85th COLUMN

86th COLUMN

87th COLUMN

88th COLUMN

89th COLUMN

90th COLUMN

91st COLUMN

92nd COLUMN

93rd COLUMN

94th COLUMN

95th COLUMN

96th COLUMN

97th COLUMN

98th COLUMN

99th COLUMN

100th COLUMN

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

M

2

***Copper-Zirconium Alloys.** S. A. Pogodin and I. S. Shumova (*Izvest. Sekt. Fiziko-Khimich. Analiz. (Ann. Secteur Anal. Phys. Chim.)*, 1940, 12, 225-232).—[In Russian.] Copper-zirconium alloys containing up to 35-65% zirconium were prepared by melting in a magnesite crucible in a Kryptol furnace, the best results being obtained when using a KCl-NaCl mixture in equimolecular proportions as flux. The constitutional diagram was determined by thermal analysis and confirmed by microscopic examination. The liquidus consists of two branches marking the primary crystallization of copper and of the β phase, respectively. The point of intersection at the eutectic is at 12.9% zirconium, 980° C. The β phase consists of the compound Cu_2Zn (32-65% zirconium) with a melting point of 1138° C. The solid solubility of zirconium in copper was investigated microscopically. The limiting solubilities are 0.9% at 925° C., 0.7% at 825° C., and 0.28% at 600° C. These experimental results agree very well with those calculated from Le Chatelier's expression. The existence of precipitation-hardening in copper-zirconium alloys was confirmed by hardness tests on cast alloys quenched from 900° C. and heat-treated at 300° C. for periods up to 20 hrs. The hardness-heat-treatment-time curves after falling to a minimum at the beginning rise to a well-marked maximum, the hardness then falling off slightly, and after passing through a second flat maximum ultimately declining.—A. B.

WATERL. 1001

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827 2828 2829 2830 2831 2832 2833 2834 2835 2836 2837 2838 2839 2840 2841 2842 2843 2844 2845 2846 2847 2848 2849 2850 2851 2852 2853 2854 2855 2856 2857 2858 2859 2860 2861 2862 2863 2864 2865 2866 2867 2868 2869 2870 2871 2872 2873 2874 2875 2876 2877 2878 2879 2880 2881 2882 2883 2884 2885 2886 2887 2888 2889 2890 2891 2892 2893 2894 2895 2896 2897 2898 2899 2900 2901 2902 2903 2904 2905 2906 2907 2908 2909 2910 2911 2912 2913 2914 2915 2916 2917 2918 2919 2920 2921 2922 2923 2924 2925 2926 2927 2928 2929 2930 2931 2932 2933 2934 2935 2936 2937 2938 2939 2940 2941 2942 2943 2944 2945 2946 2947 2948 2949 2950 2951 2952 2953 2954 2955 2956 2957 2958 2959 2960 2961 2962 2963 2964 2965 2966 2967 2968 2969 2970 2971 2972 2973 2974 2975 2976 2977 2978 2979 2980 2981 2982 2983 2984 2985 2986 2987 2988 2989 2990 2991 2992 2993 2994 2995 2996 2997 2998 2999 3000 3001 3002 3003 3004 3005 3006 3007 3008 3009 3010 3011 3012 3013 3014 3015 3016 3017 3018 3019 3020 3021 3022 3023 3024 3025 3026 3027 3028 3029 3030 3031 3032 3033 3034 3035 3036 3037 3038 3039 3040 3041 3042 3043 3044 3045 3046 3047 3048 3049 3050 3051 3052 3053 3054 3055 3056 3057 3058 3059 3060 3061 3062 3063 3064 3065 3066 3067 3068 3069 3070 3071 3072 3073 3074 3075 3076 3077 3078 3079 3080 3081 3082 3083 3084 3085 3086 3087 3088 3089 3090 3091 3092 3093 3094 3095 3096 3097 3098 3099 3100 3101 3102 3103 3104 3105 3106 3107 3108 3109 3110 3111 3112 3113 3114 3115 3116 3117 3118 3119 3120 3121 3122 3123 3124 3125 3126 3127 3128 3129 3130 3131 3132 3133 3134 3135 3136 3137 3138 3139 3140 3141 3142 3143 3144 3145 3146 3147 3148 3149 3150 3151 3152 3153 3154 3155 3156 3157 3158 3159 3160 3161 3162 3163 3164 3165 3166 3167 3168 3169 3170 3171 3172 3173 3174 3175 3176 3177 3178 3179 3180 3181 3182 3183 3184 3185 3186 3187 3188 3189 3190 3191 3192 3193 3194 3195 3196 3197 3198 3199 3200 3201 3202 3203 3204 3205 3206 3207 3208 3209 3210 3211 3212 3213 3214 3215 3216 3217 3218 3219 3220 3221 3222 3223 3224 3225 3226 3227 3228 3229 3230 3231 3232 3233 3234 3235 3236 3237 3238 3239 3240 3241 3242 3243 3244 3245 3246 3247 3248 3249 3250 3251 3252 3253 3254 3255 3256 3257 3258 3259 3260 3261 3262 3263 3264 3265 3266 3267 3268 3269 3270 3271 3272 3273 3274 3275 3276 3277 3278 3279 3280 3281 3282 3283 3284 3285 3286 3287 3288 3289 3290 3291 3292 3293 3294 3295 3296 3297 3298 3299 3300 3301 3302 3303 3304 3305 3306 3307 3308 3309 3310 3311 3312 3313 3314 3315 3316 3317 3318 3319 3320 3321 3322 3323 3324 3325 3326 3327 3328 3329 3330 3331 3332 3333 3334 3335 3336 3337 3338 3339 3340 3341 3342 334

M

10

***Copper-Zirconium Alloys.** S. A. Pogodin, I. S. Shumova, and P. A. Kugutaheva (*Compt. rend. (Doklady) Acad. Sci. U.R.S.S.*, 1949, 27, 670-672; *Brit. Abs.*, 1946, [A 1], 18).—Thermal analysis of copper-zirconium alloys containing up to 30% of zirconium shows primary crystallization of copper-rich solid solutions and of Cu_2Zr or solid solutions of copper in Cu_2Zr , with a eutectic at 980° C., 12-9% of zirconium. The dystectic point corresponding to Cu_2Zr is at 1140° C., 32-4% of zirconium. The microstructure of quenched samples annealed at various temperatures shows that the solubility of zirconium in copper is 0-9% at 925° C., 0-7% at 825° C., and 0-28% at 600° C. The addition of 0-14-0-30% of zirconium increases the resistance of work-hardened copper to annealing at 400-500° C., and decreases its conductivity by +15%.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SHUMOVA, I.S.

POGODIN, S.A.; SHUMOVA, I.S.

Equilibrium diagram of the system aluminum-indium. Izv. Sekt. fiz.-khim.
anal. 17:200-203 '49.
(MLRA 7:6)

1. Institut obshchey i neorganicheskoy khimii [im. N.S.Kurnakova]
Akademii nauk SSSR. 2. Gosudarstvennyy nauchno-issledovatel'skiy insti-
tut redkikh i malykh metallov.
(Aluminum-indium alloys)

1. APOLLONOVA, L., SHUMOVA, N.
2. USSR (600)
4. Phonograph Records
7. Long-playing record. Radio, No. 11, 1952
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

6(5)

06438

SOV/107-59-5-33/51

AUTHORS: Apollonova, L., Shumova, N.
TITLE: Stereophonic Records
PERIODICAL: Radio, 1959, Nr 5, pp 42 - 45 (USSR)
ABSTRACT: The authors describe in detail the stereophonic recording system which was developed abroad. They mention the 45/45 system recommended by the International Electrical Engineering Commission. There are 7 diagrams, 1 table and 1 graph.

Card 1/1

APOLLONOVA, Lyubov' Pavlovna; SHUMOVA, Nina Dmitriyevna;
KOROL'KOV, V.G., red.

[Mechanical sound recording] Mekhanicheskaya zvukozapis'.
Moskva, Energiia, 1964. 240 p. (MIRA 17:12)

APOLLONOVA, L.P.; SHUMOVA, N.D.

Distortions caused by the tone arm of the sound pickup and ways to
reduce them. Trudy VNAIZ no.5:34-49 '59. (MIRA 15:4)
(Sound—Recording and reproducing) (Phonographs—Testing)

PA 61/49THO

SHUMOVA, N. T.

USSR/Medicine - Central Nervous System Nov/Dec 48
Medicine - Hypercholesteremia

"Experimental Data on the Problem of the Importance
of Degenerative Processes of the Central Nerve
Fibers of the Brain in the Genesis of Hyperchole-
steremia," N. T. Shumova, Chair of Path Physiol.,
First Moscow Ord of Lenin Med Inst, 10 pp

"Arkhiv Patol" Vol X, No 6

Endogenous hypercholesteremia may be caused by a
disease of the central cholesterol depot in the
brain associated with phenomena of degeneration of
myelin fibers, with myelin decomposition, and with

61/49THO

USSR/Medicine - Central Nervous System Nov/Dec 48
(Contd)

the transfer of the most essential component of
myelin - cholesterol in the blood.

61/49THO

SHUMOVA, O.V.

Shumova, O. V. -- "The Pathogenesis and Treatment of Diseases from Burns."
Acad Med SciUSSR. Moscow, 1956. (Disseration For the Degree of Candidate
in Medical Sciences).

So: Knizhnaya Letopis', No. 11, 1956, pp 103-114

SHUMOVA, O.V., kand. med. nauk.

Result of treatment of burns by the A.V. Vishnevskii method. Sov. med.
22 no.12:60-65 D '58. (MIRA 12:1)

1. Iz 3-go khirurgicheskogo otdeleniya (zav. - prof. G. D. Vilyavin)
Institut khirurgii imeni A.V. Vishnevskogo (dir. - deystvitel'nyy chlen
Akademii meditsinskikh nauk SSSR prof. A.A. Vishnevskiy).

(BURNS, ther.
(Rus))

SHUMOVA, O.V., ~~land~~ med.nauk

Pathogenesis and treatment of pulmonary edemas in mitral stenosis.
Zdrav. Kazakh. 21 no.9:9-12 '61. (MIRA 14:10)

1. Iz 1-go khirurgicheskogo otdeleniya (zav. - doktor med.nauk
N.K.Galankin) Instituta khirurgii imeni A.V.Vishnevskogo AMN SSSR.
(PULMONARY EDEMA) (MITRAL VALVE---DISEASES)

SHUMOVA, O. V., Moskva, Leninskiy prosp., d. 87a, korp. 1. kv. 48

Surgical treatment of mitral insufficiency. Grud. khir. 4 no.1:
10-12 Ja-F '62. (MIRA 15:2)

1. Iz Instituta khirurgii imeni A. V. Vishnevskogo AMN SSSR
(dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Vishnevskiy)

(MITRAL VALVE--SURGERY)

VILYAVIN, Georgiy Danilovich, prof.; SHUMOVA, Olimpiada Vasil'yevna,
kand. med.nauk; GINZBURG, R.L., red.; MIRONOVA, A.M., tekhn.
red.

[Pathogenesis and treatment of burn disease] Patogenez i le-
chenie ozhogovoi bolezni. Moskva, Medgiz, 1963. 275 p.
(MIRA 16:12)

(BURNS AND SCALDS)

AUTHORS: Polivanov, V.V., Il'in, V.V. SOV/48-23-4-4/21
Iz'yurov, A.V., Pyatakov, N.I., Shumova, R.V.

TITLE: The Feeding Installation of Electron Microscopes UEMB-100
(Pitayushcheye ustroystvo elektronnoy mikroskopa UEMB-100)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1959,
Vol 23, Nr 4, pp 450 - 453 (USSR)

ABSTRACT: First, mention is made of the investigation carried out by
Leisegang (Ref 1), and it is pointed out that the require-
ment in electron microscopes with voltages as high as
100 kv of not allowing voltage and current fluctuations
at the lenses to exceed $14 \cdot 10^{-3} \%$ can be met only by
electronic stabilization of the current source. Figure 1
shows the block diagram of the apparatus. The electromagnetic
stabilizer SNE-220-0,5 is made use of in the scheme. The
lens current is electronically stabilized, its fluctuation
amounting to 0.001%. The number of ampere turns of all
lenses can be varied in a wide range. The selenium rectifiers
for the high voltage of 100 kv allow a load of 120 μ A, the
electronic stabilization of this high voltage occurs through

Card 1/2

The Feeding Installation of Electron Microscopes SOV/48-23-4-4/21
UEMB-100

anode tubes of the type 6Kh6S. Here as well, voltage fluctuation amounts to 0.001%. A description follows of the current supply into the vacuum cell of the instrument. Figure 4 shows the scheme of the focusing electrode of the electron accelerator, in which a diode of the type 2D9S is used. Finally, the present paper deals with the mechanical construction of the current source, the insertion into the whole instrument, and its applicability. There are 6 figures and 3 references, 1 of which is Soviet.

Card 2/2

17(

SOV/177-58-9-2/51

AUTHORS: Zotov, A.P., Colonel of the Medical Corps, Shumova, S.V., Lieutenant-Colonel of the Medical Corps

TITLE: Analysis of Traumatism and Prophylactic Measures
(According to Material of a Hospital)

PERIODICAL: Voenno-meditsinskiy zhurnal, 1958, Nr 9, pp 7-10
(USSR)

ABSTRACT: The author tabulates and reports on traumatic cases of soldiers. The article is based on data of a garrison hospital and a treatise by N.D. Krivonosov, published in 1952. Most of the injuries occurred during off-duty hours. The author distinguishes injuries connected with economic work, casual injuries sustained during duty hours and, mainly, sports injuries. Injuries to the lower extremities predominate over others. The implementation of prophylactic measures reduced the injuries in garrisons "by half". There are 4 tables.

Card 1/1

BRONNIKOV, K.Ye., kand.med.nauk; SHUMOVA, S.V.

Meniscus injuries of the knee joint. Vest.khir. no.4:38-42
'61. (MIRA 14:4)

(~~KNEE~~ WOUNDS AND INJURIES)

SHUMOVA, S. V. (Lieutenant Colonel of the Medical Service) BRONNIKOV, K.YE.

"Remote Results of Surgical Treatment of Injuries to the Knee Joint Menisci"

Voyenno-Meditsinskiy Zhurnal, No. 10, October, 1961

L 05206-67 EWT(m)/EWP(t)/ETI : IJP(c) JD/JG

ACC NR: AP7000758

SOURCE CODE: UR/0075/66/021/006/0754/0757

AUTHOR: Sotnikov, V. S. Korolev, N. V. Shumova, V. V. and Korozova, M. N.

33
B

ORG: none

TITLE: Use of an emission microspectral method in the analysis of alloys for semiconductor devices

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 6, 1966, 754-757

TOPIC TAGS: emission spectrum, indium alloy, gallium alloy, gold alloy

21 27 27

ABSTRACT: A microspectral method for the analysis of the In - Au - Ga and other alloys in specimens weighing less than 0.5 mg is examined. Alloy specimens in tablets 50X150 microns in size were placed on a polished surface of a glass bar, and then the specimens were covered with a copper plate about 1 mm thick which was tapped lightly with a hammer so that the specimens were secured to the surface of the copper plate. Then tablets were secured to the surface layer of the plate. Pellets of standard alloys were similarly secured to a copper plate, and a microspectral analysis was made. Copper wire 0.4 mm in diameter with ends cut at a 130° angle served as the electrode. The distance between one of the electrodes from the surface of the specimen was 1 mm; the second electrode was connected to the copper plate. Orig. art. has: 2 figures and 1 table. [JPRS: 37,177]
SUB CODE: 11,20/ SUBM DATE: 02Jun65 / ORIG REF: 002

Cord 1:1 *gd*

UDC: 543.42
0423 1934

SHUMOVA, Zinaida Ivanovna; SOBKINA, Irina Viktorovna; GUSMAN, M.T., redaktor;
KOVALEVA, A.A., vedushchiy redaktor; SHIKIN, S.T., tekhnicheskii
redaktor

[Concise manual on turbine drills] Kratkii spravochnik po turboburam.
Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry,
1956. 141 p. (MLRA 9:10)
(Boring machinery)

93-4-1/20

Shumova, Z.I.

AUTHOR: Nurshanov, V.A., Shumova, Z.I.,

TITLE: Advanced Turbine Drilling Methods Must Find Wider Application (Shire ispol'zovat' peredovoy opyt ekspluatatsii turboburov)

PERIODICAL: Neftyanoye Khozyaystvo, 1957, Nr.4, pp.1-5 (USSR)

ABSTRACT: The use of turbodrilling equipment manufactured by the Uralmashzavod has yielded positive results. Turbodrilling meterage has been up to 5 million meters per annum, constituting 84.7 percent of the total USSR drilling, and 99.8 percent of the drilling operations of the Glavvostokneftedobycha Trust. New types of turbodrills are being used in exploratory drilling. They are able to drill bore holes 8 to 12 inches in diameter, and over. Although operating conditions are becoming more difficult with increasing depths, the management has failed to put the necessary effort into solving the problem of turbodrill operation and repair. An investigation of the Kuybyshevneft', Bashneft', and Chkalovnefterazvedka

Card 1/4

93-4-1/20

Advanced Turbine Drilling Methods Must Find Wider Application. (Contd).

enterprises has revealed that the quality of turbodrill maintenance work is grossly inadequate. As a result, life of the turbodrills is being greatly reduced. A table, which is included in the text, gives data on the life of turbodrills used by different enterprises. For example, turbodrill life at one of the 'Tuymazaburneft' drilling units was 40 to 60 hours before 1956. Today it is 18 hours, having been shortened by improper operating practices and faulty repair work. In many cases the manufacturing plants deliver equipment with obvious imperfections, while in other cases breaks occur in certain parts as a result of poor heat treatment. Among the plants producing defective parts is the "Borets" plant (affiliated with Glavneftemash) and the Petrov plant (located in Stalingrad). Despite the efforts of the VNIIBurneft', the Sverdlovsk and Leningrad rubber plants have failed to standardize their production of petroleum-resis-

Card 2/4

93-4-1/20

Advanced Turbine Drilling Methods Must Find Wider Application. (Contd).

tant rubber parts for the turbodrill. The Glavneft'erazvedka, which has under its jurisdiction 7 prospecting offices and 49 exploratory drilling units, has only 17 repair shops. These lack adequate equipment, which reflects in the quality of their repair work, as confirmed by tests conducted on an experimental electrified production drilling rig belonging to the Azerbaydzhan branch of the Petroleum Industry. Seventy percent of 80 reconditioned T12M2-10 turbodrills had a rotation moment ranging from 70 to 100 percent of the nominal moment, while the remaining thirty percent had a moment ranging from 30 to 70 percent. The present repair shops are too small for the volume of work required. Occasionally, a section of the drilling rig serves as a repair shop (e.g., at the Ozek-Suata, Grozneft', drilling enterprise, where this was the case until September 1956). Life of the T12M2-10 turbodrill can be extended by a better make-up of the threaded ends (torque moment 1800-2000, instead of 1200 kg). This is often impossible to put into practice, due to the lack of proper power

Card 3/4

SHUMOVA, Zinaida Ivanovna; PETROVA, Ye.A., ved.red.; POLOSINA, A.S.,
~~tekhn. red.~~

[Practical guide on the operation of turbodrills] Prakticheskoe rukovodstvo po ekspluatatsii turboburov. Moskva, Gos-
toptekhnizdat, 1962. 209 p. (MIRA 15:3)
(Turbodrills)

SHUMOVICH, M., prepodavatel' osnov tekhnicheskoy mekhaniki

In the study room for technical mechanics. Prof.-tekh. obr. 19
no.9:14-15 S '62. (MIRA 15:10)

1. Remeslennoye uchilishche No. 47, Moskva.

(Mechanics—Study and teaching)

SHUMOVICH, M., prepodavatel' tekhnicheskoy mekhaniki

School of technical creativeness. Prof.-tekh. obr. 20 no.12:
13-15 D '63. (MIRA 17:1)

1. Moskovskoye professional'no-tekhnicheskoye uchilishche No.27.

SHUMOVICH, M.

Seminar in the laboratories of an institute. Prof. tekhn. obr. 21
no. 7:10-11 J1 '64. (MIRA 17:11)

SHUMOVICH, M.

Why it is difficult to inculcate progressive practices. Prof.-tekh.
obr. 22 no.4:29-30 Ap '65. (MIRA 18:5)

31888

S/081/62/000/003/067/090
B149/B101

11.0132
AUTHORS:

Dorogochinskiy, A. Z., Mel'nikova, N. P., Svetozarova, O. I.,
Shumovskaya, V. A.

TITLE:

Effect of the degree of selected hydrogenation of unsaturated
hydrocarbons in thermocracking distillate on its thermostabili-
ty

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1962, 485, abstract
3M152 (Tr. Groznensk. neft. n.-i. in-t no. 11, 1961, 53 - 57)

TEXT: The effect of the group composition of hydrocarbons on the thermal
stability of the distillate from thermocracking, boiling out at 80 - 260°C
(obtained from the mazout of Groznenskiy paraffin-based mixed petroleum),
after selective hydrogenation to different degrees of the unsaturated
hydrocarbons (original content in the distillate: 36.4%) was investigated.
It was shown that the decrease of the fuel thermal stability depended on
the presence of diolefins and aromatic hydrocarbons with unsaturated side
chains. Mild hydrogenation (up to 16%) of the unsaturated hydrocarbons
from the distillate resulted in a fuel with satisfactory thermal stability.
Card 1/2

1. SHEROVNIKOV, T. A.
2. USSR (600)
4. Cartography
7. Arabian cartography in its origin and development, Izv. Vses. geog. ob-va 79, no. 5, 1947.
9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

~~SHUMOVSKIY, T.A.~~ ORBELI, I.A., akademik, otvetstvennyy redaktor;
BLEYKH, E.Yu., tekhnicheskiiy redaktor

[Three unknown sailing directions by Vasco de Gama's Arab pilot, Ahmad Ibn Majid, in the unique manuscript at the Oriental Institute of the Academy of Sciences of the U.S.S.R.] Tri neizvestnye lotsii Akhmada ibn Madzhida arabskogo lotsmana Vasko da-Gamy v unikal'noi rukopisi Instituta Vostokovedeniia AN SSSR. Predislovie D.A. Ol'derogge. [Perevod] Moskva, Izd-vo akad. nauk SSSR, 1957.
193 p. (MLRA 10:5)

(Pilot guides)

SHUMOVSKIY, T.A.

Arabian navigation in the middle ages. Izv.Vses.geog.ob-va 89
no.1:57-60 Ja-F '57. (MLRA 10:3)
(Navigation) (Arabs)

SHUMOVSKIY, T.A.

Theory and practice in Arabian geography. Strany i nar. Vost.
no.2:143-159 '61. (MIRA 15:3)
(Geography)

SHUMOVSKIY, T.A.

Identification of two Muslim maps in the Russian translation of
"Book of travels" by Nasir-i Khusrau. Mat. Vost. kom. Geog.
ob-va SSSR no.1:47-54 '62. (MIRA 16:9)

SOV/65-59-4-8/14

AUTHORS: Minasyan, T.S., Pal'chikov, G.F., Bolotov, L.T.,
Ovsiyannikov, P.V., Shumovskiy, V.G., Afanasenko, M.M.,
Rusakov, A.P. and Karpenko, T.G.

TITLE: Investigations in the Grozny Plants on the Catalytic
Purification of Middle Distillates Obtained During
Thermo-Cracking Processes (Iz opyta raboty groznenskikh
zavodov po kataliticheskoy ochistke srednikh distillyatov
termicheskogo krekinga)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4,
pp 44-48 (USSR)

ABSTRACT: The octane numbers of gasolines can be improved by
catalytic cracking of the kerosine-gas-oil fractions,
obtained during fractional distillation. This,
however, seems unsatisfactory because these fractions are
high quality starting materials for jet and diesel fuels
etc. The middle fractions, obtained during thermal
cracking, used as diesel fuels, contain a high quantity
of unsaturated hydrocarbons and have a low cetane number.
The quality of diesel fuels can be improved by using
aluminium silicate catalysts and enriched secondary
distillates. In this way, the consumption of unsaturated

Card 1/3

SOV/65-59-4-8/14

Investigations in the Grozny Plants on the Catalytic Purification of Middle Distillates Obtained During Thermo-Cracking Processes

compounds is decreased and the cetane number of the diesel fuels increased, whilst maintaining the standards required by GOST for diesel fuels. Tests were carried out on substances obtained after second distillation of the broad fraction and also by using mixtures of these substances and the kerosine fraction obtained during thermal cracking. The properties of the tested materials are given in table 1 and the process conditions in table 2. Some high octane gasoline was obtained during this process. This was purified, washed and reacted with an 18 to 20% NaOH solution. After stabilisation it was purified again, treated with a 15 to 18% NaOH solution and washed. The stabilised pure gasoline had an octane number of 76. A catalyst of decreased activity (29 to 30) was used during the enriching process. The properties of the aluminium silicate catalysts are given (table 3). Table 4 gives the hydrocarbon composition of the gas. The catalytic cracking of middle fractions can

Card 2/3

SOV/65-59-4-8/14

Investigations in the Grozny. Plants on the Catalytic Purification
of Middle Distillates Obtained During Thermo-Cracking Processes

be carried out on existing cracking plants and it is
pointed out that the deposition of coke does not exceed
the allowed limits. There are 4 tables.

Card 3/3

S/081/61/000/021/070/094
B138/B101

AUTHORS: Bolotov, L. T., Shumovskiy, V. G., Ovsyannikov, P. V.,
Pal'chikov, G. F., Minasyan, T. S., Afanasenko, M. M., Rusakov,
A. P., Burlakov, A. G., Karpenko, T. G.

TITLE: Pilot run for the commercial processing of a secondary raw
material on a catalytic cracking unit

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 401 - 402,
abstract 21M82 ([Tr.] Groznensk. neft. in-t. sb. 23, 1960,
97 - 105)

TEXT: With the aim of increasing supplies of quality high-speed diesel
fuels, experiments have been conducted, in commercial conditions, for the
refining of the medium fractions of the thermal cracking process by re-
distribution of the hydrogen on the aluminosilicate catalyst. The
characteristics of the starting material and of the end product are
enumerated. It is said that it would be possible to use this method for
the production of the components of high-octane automobile gasolines and
low pour-point high-speed diesel fuels. Data are given for the production

Card 1/2

S/081/62/000/012/046/063
B156/B144

AUTHOR: Shumovskiy, V. G.

TITLE: Diesel fuel produced from thermal cracking kerosene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 503, abstract
12M151 (Novosti نفت. i gaz. tekhn. Neftepererabotka i nefte-
khimiya, no. 9, 1961, 3-6)

TEXT: The ideal conditions for catalytic refining of kerosene to produce
a diesel fuel component have been determined on the basis of two years'
operation of an industrial plant at the Groznyy refinery. It has been
established that the process can be carried out in standard catalytic
cracking plant. [Abstracter's notes: Complete translation.] ✓

Card 1/1

CHUMOVSKIY, Ye.G.

Deceased 1956

Metallurgy

See ILC

SHUMOVSKY, Yurij F.

[Under the blazing African sun] Pid hariachym sontsem Afryky.
Vinnipeg, Drukomy nakladom Vyd.spilky "Tryzub," 1956. 169 p.
(MLRA 9:12)

(Africa--Description and travel)

82096
S/184/60/000/03/06/010

18.1250

AUTHORS: Yukalov, I.N., Candidate of Technical Sciences, Shumratova, G.N.,
Engineer

TITLE: Nickel-Molybdenum and Nickel-Silicon Acidproof Alloys

PERIODICAL: Khimicheskoye mashinostroyeniye, 1960, No. 3, pp. 28 - 31

TEXT: New technological processes in the chemical industry, e.g. the evaporation of acids in a vacuum, require special equipment made of alloys with specific physical-chemical properties. For manufacturing this equipment certain nickel-molybdenum - silicon and nickel-chromium-molybdenum alloys can be used. Nickel-molybdenum alloys ЭИ460 (EI460) ЭИ461 (EI461) (corresponding to TU No. 1044), Hastelloy A, B and C have a high corrosion-resistance in a number of aggressive media. Their mechanical properties are close to those of high-grade steels. The manufacturing of seamless pipes of these alloys is not mastered; electrically welded, thin-walled pipes can be used. The EI460 alloy (about 20% Mo content) has a high corrosion-resistance in hydrochloric and sulfuric acids of any concentration and in their salts at 20°C. In sulfuric acid it maintains its resistance up to 50°C and at 100°C it is resistant when the concentration does not exceed 30-50%. In hydrochloric acid

Card 1/6